



# Mason City Condominium Development

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## Pre-Existing Site Development and goals

1. Layout the site to maximize the space
2. Design a brand new condominium that fits with the natural surrounding
3. Design a parking lot and access road that will allow cars to leave and enter with ease
4. Landscape the property to give it an aesthetic appeal



Figure 1. Pre-Existing site layout



Figure 2. Damaged Entrances

## Design Alternatives and Methods Used

Parking Design 2 was recommended to decrease the total length of the parking lot. This allows for more green space and the addition of a retention pond.

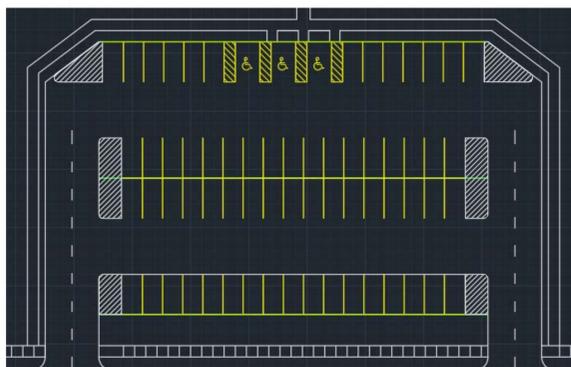


Figure 3. Parking Design 1

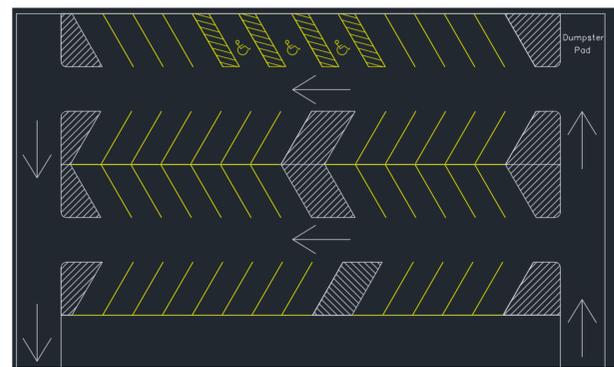


Figure 4. Parking Design 2

## Final Condominium Development Design

Our final design included a brand new, 5 story condominium, constructed out of steel, concrete, and wood. Parking design in Figure 4 depicts the final design of the parking lot that allows typical passenger vehicles and garbage trucks to maneuver through the lot. Pedestrian walkways and gathering areas were also included and are shown below.



## Cost of Project and Conclusion

We recommend steel framing for the first floor with 4 stories of wood placed above. The parking should follow Figure 4 to decrease the amount of space needed for the required number of stalls. We suggest adding a retention basin at the front of the lot to handle storm water runoff. We recommend getting an easement from the land owner to the West in order to grade the fill needed to elevate the structure. If not, a retaining structure must be added.

Item	Quantity	Unit	Unit Price	Total
Demolition	3565	ft <sup>2</sup>	\$ 3.00	\$ 10,695.00
Suburban Podium Construction	87725	ft <sup>2</sup>	\$ 160.00	\$ 14,036,000
Site Grading	18582	yd <sup>3</sup>	\$ 3.00	\$ 55,745
Combination Curb & Gutter	812	ft	\$ 8.89	\$ 7,219
Asphalt Surfaces	11212.5	ft <sup>3</sup>	\$ 11.00	\$ 123,338
Concrete Sidewalks	1040	ft <sup>2</sup>	\$ 10.00	\$ 10,400
Paint Pavement Markings 4"	1300	ft	\$ 0.20	\$ 260
Sewer Piping - 15" Dia	250	ft	\$ 45.00	\$ 11,250
Water Line Piping - 12" Dia	250	ft	\$ 85.00	\$ 21,250
Water Line Piping - 4" Dia	200	ft	\$ 25.00	\$ 5,000
New Manholes	1	ea	\$ 3,500.00	\$ 3,500
New Fire Hydrant Assembly	1	ea	\$ 3,500.00	\$ 3,500
Easements & Property Acquisition	---	---	---	\$ 50,000
<b>Construction Subtotal</b>				<b>\$ 14,338,157</b>
10% Contingencies	---	---	---	\$ 1,433,816
20% Engineering and Administration	---	---	---	\$ 2,867,631
<b>Total Project Cost</b>				<b>\$ 18,639,604</b>

## References

1. ACI
2. ADA
3. AISC
4. APA
5. APAI
6. ASCE
7. Mason City Ordinances
8. NDS
9. SUDAS
10. TMS